

REMARKS

Prior to further examination and supplemental to the Reply filed on August 15, 2007, applicants respectfully request consideration and examination in view of the above amendments and the following remarks.

Claims 1-15 were pending at the time of the outstanding Office Action. Claims 16-18 have been added. Support for this amendment can be found, for example, from page 8, line 15 to page 9, line 2. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, is presented, with an appropriate defined status identifier. Thus, claims 1-18 are now pending in the application.

Claim Rejections under 35 U.S.C. 103:

Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsubara (U.S. Patent App. Pub. No. 2002/0057843) in view of JPEG2000 Image Coding System: Compound Image File Format (hereinafter JPEG2000 CIFF). In view of the remarks below, the rejections are respectfully traversed.

The independent claims teach several different parameters that are utilized in expanding an image. Specifically, the independent claims recite a coding parameter, an expanding parameter, and an extracting parameter calculated based on the coding parameter and the expanding parameter, among others. The Office Action asserts that Matsubara teaches coding parameters: "The level numbers are the coding parameters" (page 3, lines 6-9). The Office Action asserts that Matsubara teaches expanding parameters: "The determined image size is used to designate levels" (page 3, lines 10-12). Finally, the Office Action asserts that Matsubara teaches calculating the extracting parameter: "The level numbers related to the determined image size are calculated" (page 3, lines 13-15). Through these assertions, the Office Action asserts that both the coding parameters and the extracting parameters are level numbers. However, it is clear both from the specification of the invention, and the independent claims, that the coding parameters and extracting parameters include separate and distinct parameters. Further, the independent claims require that the

extracting parameters are calculated “based on the coding parameters and the expanding parameters.” However, there is no teaching or suggestion in Matsubara, if level numbers were incorrectly interpreted to be the extracting parameters, that the level numbers are calculated based upon more than one parameter. Matsubara teaches that the level numbers are determined based upon input image size and transform coefficients:

“Then, a level determine part 102 determines, **based on the thus-input image size**, by referring to **decomposition-level-type wavelet transform coefficients** previously stored in a wavelet transform coefficient memory 103, the level number ‘i’ (integer) of a decomposition level of wavelet transform coefficients such that the wavelet transform coefficients in the decomposition level ‘i+1’ has the size maximum but not larger than or equal to the input image size, and, also, the wavelet transform coefficients in the decomposition level ‘i’ has the size minimum but not smaller than the input image size. That is, the value ‘i’ is obtained according to the above-mentioned formula (1).” (paragraph 0101, emphasis added)

There is no teaching or suggestion in Matsubara that the level number is determined on two parameters as required, or that one of the parameters is the determined image size. Rather, the input image size is utilized, along with wavelet transform coefficients, to determine the level.

Independent claim 1, recites an image expanding apparatus, comprising:

“coding parameter detecting means for detecting **coding parameters** from an image code, said image code including a plurality of layout objects, each layout object of said plurality of layout objects including a plurality of tiles, said coding parameters including a number of layout objects of the plurality of layout objects that are in a particular page;

expanding parameter designating means for designating **expanding parameters**, said expanding parameters including a number of particular layout objects to be displayed in an expanded image;

extracting parameter calculating means for **calculating extracting parameters based on the coding parameters and the expanding parameters**, said extracting parameters including (i) one or more certain layout objects of the plurality of layout objects that are

necessary for providing the expanded image and (ii) for each layout object of the one or more certain layout objects, one or more particular tiles of the plurality of tiles of the layout object that are to be used to provide the expanded image; and

code extracting means for extracting a code necessary for obtaining the expanded image designated by the expanding parameters from the image code with reference to the extracting parameters.” (Emphasis Added).

Matsubara neither discloses nor suggests an image expanding apparatus including the above-quoted features for at least the following reasons. As shown above, Matsubara does not disclose three separate parameters utilized in image expansion, or the relationships between the three parameters. Further, Matsubara does not disclose the features of these three parameters as recited in claim 1. As mentioned above, the Office Action teaches the coding parameters to be the level numbers. However, claim 1 explicitly asserts that the coding parameters include a number of layout objects of the plurality of layout objects that are in a particular page. The Office Action asserts that JPEG2000 CIFF discloses the details of the parameters. However, there is no suggestion that Matsubara would be able to perform calculations based upon those details allegedly disclosed by JPEG2000 CIFF. Further, the Office Action explicitly states, “[t]he Examiner does not rely on JPEG2000 CIFF to teach the coding parameter detecting means. The Examiner bases on JPEG2000 CIFF to teach details of image code.” (page 4, lines 17-19). Thus, there is no reliance on JPEG2000 CIFF to teach the detection of the three parameters, just the details of each parameter. This non-reliance on the part of the Examiner is correct, because JPEG2000 CIFF does not teach the detection of the three parameters. Matsubara also clearly does not teach the detection of the three parameters, failing to even teach three parameters that are utilized. Thus, Matsubara, even in combination with JPEG2000 CIFF, fails to meet the limitations of claim 1.

Therefore, independent claim 1 is neither disclosed nor suggested by the Matsubara reference, the JPEG2000 CIFF reference, or the combination of the two, and, hence, is believed to be allowable.

Independent claim 6 recites an image expanding method with features similar to features of an image expanding apparatus of independent claim 1 and, thus, is believed to be allowable for at least the same reasons that independent claim 1 is believed to be allowable.

Independent claim 11 recites a storing device storing a program which, when executed on a computer, causes the computer to perform an image expanding method with features similar to features of an image expanding apparatus of independent claim 1 and, thus, is believed to be allowable for at least the same reasons that independent claim 1 is believed to be allowable.

The dependent claims are deemed allowable for at least the same reasons indicated above with regard to the independent claims from which they depend. . In addition, they recite additional patentable features when considered as a whole. As mentioned above, Applicants believe that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

For example, added dependent claims 16-18 recite additional patentable features. Specifically, the claims recite the feature “wherein the code necessary for obtaining the expanded image is related to a resolution level obtained by the extracting parameter calculating means..” The only mention of resolution in Matsubara is in the Description of the Related Art, when Matsubara discloses:

“Therefore, in order to output a coded image to various output devices having different resolutions, expansion/reduction (change in the number of pixels) of an decompressed image should be previously performed. Moreover, in the related art, according to wavelet transform, a decompressed image has the same size as that of an original image.”
(paragraph 0004)

Thus, it is clear that there is no relationship between resolution level of the expanded image and the code necessary for obtaining the expanded image. Further, there is no teaching or suggestion in Matsubara that resolution level would be calculated by the parameter extracting means, let alone utilized in a determination of code for the expanded image. According to Matsubara, the resolution level of the decompressed image would be the same as that of the original image, so it would necessarily not be a characteristic of the expanded image that would need to be calculated. Thus, it is respectfully submitted that Matsubara does not teach the features of dependent claims 16-18.

Conclusion:

Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

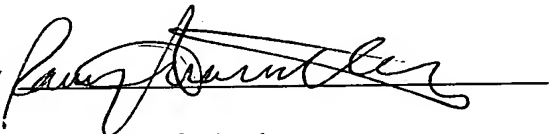
The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check or credit card payment form being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. § 1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

Date September 21, 2007

FOLEY & LARDNER LLP
Customer Number: 22428
Telephone: (202) 945-6059
Facsimile: (202) 672-5399

By 

George C. Beck
Registration No. 38,072
Attorney for Applicant

Ramya Ananthanarayanan
Registration No. 59,597
Agent for Applicant